

CLAIMS:

1. A solder composition made of a mixture of a liquid substance and solder particles; wherein
the liquid substance contains a flux component whose reaction temperature is close to the melting point of the solder particle, and having viscosity that flows at a normal temperature and that deposits in layers on a base material; and
the solder particles are granular agents that precipitate in the liquid substance towards the base material, having a mixing ratio and a particle diameter to be uniformly dispersible within the liquid substance.
2. The solder composition as claimed in claim 1, wherein the mixing ratio of the solder particles is less than or equal to 30wt%.
3. The solder composition as claimed in claim 1, wherein the particle diameter of the solder particle is less than or equal to 35 μ m.
4. The solder composition as claimed in claim 1, wherein only a natural oxidized film is formed on a surface oxidized film of the solder particles.
5. The solder composition as claimed in claim 1, wherein the flux component contained in the liquid substance accelerates the soldering between the solder particles and the base material and accelerates coalescence of the solder particles with the solder coating formed on the base material while suppresses

coalescence of the solder particles by the reaction product thereof.

6. The solder composition as claimed in claim 5, wherein the flux component is acid.

7. The solder composition as claimed in claim 6, wherein the acid is an organic acid.

8. The solder composition as claimed in claim 1, wherein the liquid substance is fat.

9. The solder composition as claimed in claim 8, wherein the flux component is free fatty acid contained in the fat.

10. The solder composition as claimed in claim 8, wherein the fat is fatty acid ester.

11. The solder composition as claimed in claim 10, wherein the fatty acid ester is neopentylpolyolester.

12. The solder composition as claimed in claim 8, wherein an acid value of the fat is greater than or equal to one.

13. A method of forming bumps comprising:
deposition step for depositing on a base material a solder composition including a mixture of a liquid substance with flux component whose reaction temperature is close to the melting point of the solder particles, having such a viscosity that flows at normal temperature and that deposits in layers on a base material, and solder

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particles that precipitate through the liquid substance
towards the base material and that have a mixing ratio and
10 a particle diameter to be uniformly dispersible within the
liquid substance; and

reflow step for heating the solder composition and
forming bumps made up of solder particles on the base
material.

14. The method of forming bumps as claimed in claim
13, wherein the solder particles are uniformly dispersed
in the liquid substance by stirring the solder composition
in a pre-stage of the deposition step.

15. The method of forming bumps as claimed in claim
13, wherein the solder composition is spin coated to a
uniform thickness by rotating the base material in the
deposition step.

16. The method of forming bumps as claimed in claim
13, wherein the solder composition is poured into a
container arranged with the base material, and the base
material is immersed in the solder composition in the
5 deposition step.